

HAMMOND (W^m A)

A

MEDICO-LEGAL STUDY

OF THE CASE OF

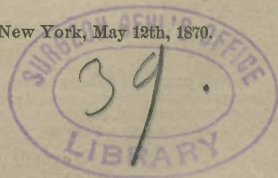
DANIEL McFARLAND.

BY

✓
WILLIAM A. HAMMOND, M.D.,

PROFESSOR OF DISEASES OF THE MIND AND NERVOUS SYSTEM AND OF CLINICAL MEDICINE
IN THE BELLEVUE HOSPITAL MEDICAL COLLEGE, PHYSICIAN-IN-CHIEF TO THE NEW
YORK STATE HOSPITAL FOR DISEASES OF THE NERVOUS SYSTEM, ETC.

Read before the Medico-Legal Society of the City of New York, May 12th, 1870.



NEW YORK:

D. APPLETON & COMPANY,

90, 92 & 94 GRAND STREET.

1870.

ADVERTISEMENTS.

THE JOURNAL OF
PSYCHOLOGICAL MEDICINE:

A QUARTERLY REVIEW OF

*Diseases of the Nervous System, Medical Jurisprudence,
and Anthropology.*

EDITED BY

WILLIAM A. HAMMOND, M. D.,

*Professor of Diseases of the Mind and Nervous System in the Bellevue Hospital Medical
College,*

Is published quarterly, each number containing not less than 208 pages, making one large
volume annually.

THE VOLUME BEGINS WITH THE JANUARY NUMBER.

Terms, \$5.00 per annum. Specimen numbers, by mail, \$1.00.

"We looked with great expectations upon the project of this journal at its first announcement, because we were pretty well acquainted with the qualities of the gentleman who assumed to stand as the conductor of the large enterprise. * * * It has been from the first a journal of so much breadth and depth of professional and general learning, and conducted with so much dignity and discretion, as to command the attention and respect of the educated and scientific circles, not only throughout our own country, but also in foreign lands. Within the last year the publication of this journal has fallen into the hands of D. Appleton & Co., which is ample assurance that it will be sent out in its material and mechanical features in a style becoming its very conspicuous intellectual qualities. We will add that it has, from its first number, been printed superbly in all particulars, that it has lately been enlarged, and is now the most elegantly printed quarterly in America."—*National Intelligencer.*

"It is the only work of the kind known to us as published in this country, and, under the management of the ablest medical psychologist and jurist among us, we take pride in saying it at least equals any of its foreign competitors. To the physician interested in the higher manifestations of the wonderful organic functions of human life, as well as in practical teachings of pathology and therapeutics, and the bearing of the law upon facts that may be subject to medico-legal inquiry, this journal of Dr. Hammond is of special value. But it is scarcely less interesting to live men of other professions, as is evident from a survey of its contents."—*Franklin Repository.*

"This magazine is filled, as usual, with information which must be very valuable to members of the medical profession. All the most important cases recently met with are fully reported, accompanied by the modes of treatment which were found to be beneficial. In it likewise will be found a department set aside for medical jurisprudence, which will be found interesting to those learned in the law. We have yet much to learn in this country of that branch of knowledge with which the barristers of the Old World have been long familiar. Many of the articles, however, will attract the attention of non-professional readers."—*Philadelphia Age.*

"Quarterly that does honor to the professions to whom it is chiefly addressed."—*New York World.*

CLUB RATES.

N. Y. MEDICAL JOURNAL and Appletons' New Weekly JOURNAL....	\$7.00
PSYCHOLOGICAL " " " "	8.00
N. Y. MEDICAL JOURNAL and PSYCHOLOGICAL JOURNAL.....	8.00

PREMIUM PORTRAIT.

As a premium to new subscribers to either of our Medical Journals at the regular subscription rate, we will send a magnificent line and stipple engraving, size 19x24 inches, of the distinguished physician, the late Dr. JOHN W. FRANCIS. This engraving is eminently adapted to adorn the parlor of the physician. The price of the portrait alone is \$3.

Payment in all cases must be in advance.

Remittances should be made by postal money order or check to the Publishers,

D. APPLETON & CO.,

90, 92 & 94 Grand St., New York.

A

MEDICO-LEGAL STUDY

OF THE CASE OF

DANIEL McFARLAND.

BY

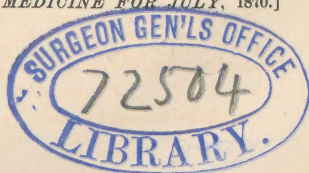
WILLIAM A. HAMMOND, M.D.,

PROFESSOR OF DISEASES OF THE MIND AND NERVOUS SYSTEM AND OF CLINICAL MEDICINE
IN THE BELLEVUE HOSPITAL MEDICAL COLLEGE, PHYSICIAN-IN-CHIEF TO THE NEW
YORK STATE HOSPITAL FOR DISEASES OF THE NERVOUS SYSTEM, ETC.

Read before the Medico-Legal Society of the City of New York, May 12th, 1870.

*presented by
J. Shrady,
M.D.*

[FROM THE JOURNAL OF PSYCHOLOGICAL MEDICINE FOR JULY, 1870.]



NEW YORK:

D. APPLETON & COMPANY,

90, 92 & 94 GRAND STREET.

1870.

A

MEDICO-LEGAL STUDY

OF THE CASE OF

DANIEL MCFARLAND.¹

I. THE mind of man may be defined as a force developed by nervous action, and is appropriately divisible into four distinct parts: the perception, the intellect, the emotions, and the will. Either one of them may be exercised independently of the other, though they are very intimately connected, and in all continuous mental processes are more or less brought into relative and consecutive action: 1. Thus we see an object, hear a sound, taste a flavor, smell an odor, or touch a substance, and perception is exercised. 2. We form an

¹ This paper is republished from the *PSYCHOLOGICAL JOURNAL*, for July, 1870, at the request of many medical and legal friends. It was read before the Medico-Legal Society of the City of New York, on the evening of May 12th, and was honored by a special vote of commendation. That the principles which it enunciates are true, will scarcely, I think, be questioned by those whose knowledge of psychological medicine gives any value to their opinions; that those principles are applicable to the chief actor in the tragedy, will not, I imagine, be doubted by those whose judgments are not warped by a prejudice more powerful even than ignorance.

idea of the material which has been brought to our knowledge through the medium of our senses, and the intellect acts. 3. We are moved to pleasure, disgust, affection, or some other emotion by the information obtained, and the judgment formed; and 4. We act in accordance therewith, and thus bring the will into operation.

II. Individuals of well-balanced minds, and under ordinary circumstances, do not act either from mere sensorial impressions or in accordance with their emotions, but from the ideas which their intellect presents to them, i. e., after due reflection. Others, however, less happily constituted, and all of us in times of excitement or emergency, under the influence of certain drugs, or while suffering from bodily disease, are guided to a great extent by the senses or the emotions alone, and thus either bring the intellect into feeble action, or are not influenced by it at all.

III. Again, the intellect may be intensely preoccupied by some engrossing subject, an impression is made upon the senses, and an act is performed in accordance with the perception, but without even the knowledge of the intellect. Individuals thus circumstanced are said to be "absent-minded."

IV. On the other hand, the senses may become so highly abstracted that both the intellect and the will are paralyzed: 1. Thus a frightful object or event is said to "freeze with horror." 2. The hand coming suddenly and unexpectedly in contact with a cold, dead human body has excited the emotion of fear to such an extent as to induce permanent insanity. 3. A sound such as that of burglars breaking into a house has been known to cause complete mental and physical paralysis for several hours. 4. In these and in many similar in-

stances which are familiar to all, the cause excites only the perception and the emotions, and in some cases touches the first only. The will, in persons normally constituted and in good health, never acts unless set in motion either by the perception, the emotions, or the intellect, and then the resultant action is a logical and direct consequence of the sensorial, intellectual, or emotional factor.

V. Now, in individuals of well-formed brains, which are free from structural changes, and nourished with a due supply—neither excessive nor deficient—of healthy blood, the perception, the intellect, the emotions, and the will, act in a manner common to mankind in general: 1. Slight changes in the formation or nutrition of the brain induce corresponding changes in the several parts of the mind, or in it as a whole. As no two brains are precisely alike, so no two persons are precisely alike in their mental processes. 2. So long, however, as the deviations are not directly at variance with the average human mind, the individual is sane. If they are at variance, he is insane.

VI. But within the limits of mental health marked irregularities are met with in the different parts of the mind: 1. Thus some persons are noted for never perceiving things exactly as they are. 2. Others have the emotional system inordinately or deficiently developed. 3. Others are weak in judgment, defective in memory, feeble in powers of application, or vacillating in their opinions. 4. Others, again, are lacking in volitional power, and the ability to perform certain acts, to refrain from others, or to follow a definite course of action which the intellect tells them is expedient and wise. (a.) Such persons are "eccentric," and the emotions which influence them most powerfully are those

which react upon themselves—vanity, pride, the love of approbation or of notoriety, etc. (b.) They stand upon the verge of insanity with a decided predisposition to mental disease, and ordinarily do not pass the limit merely for want of a sufficient exciting cause.

VII. Others are naturally so constituted, or through the operation of morbid causes are so changed, that the several parts of their minds, as a whole or separately, are exercised in an abnormal manner: 1. Thus the perception may be deranged to such an extent as to render them continually the victims of erroneous sensorial impressions. 2. These, when produced by the false interpretation of real objects, are called illusions, and when originating internally, and having no real basis, hallucinations. Illusions are eccentric, hallucinations centric. The latter are, therefore, of more serious importance. 3. An individual who has such derangements of his sensorial processes is suffering from the primary form of mental aberration—perceptual insanity.

VIII. Thus far there is no error of intellect: 1. He recognizes the fact that his senses convey false impressions to the higher parts of the brain, or that these latter are so disordered as to act from within upon the sensorial organs, and he is not deceived, except, perhaps, for the instant. 2. We all at times momentarily have illusions and hallucinations, but the judgment at once prevents continued deception. 3. When this fails to be the case, delusions exist, and we are the subjects of intellectual insanity.

(a.) Thus a person has a sensation of a fly or an ant crawling over his skin. He applies his finger to the spot, and ascertains that he has a false sensation, an illusion, or an hallucination. This is probably the end

of it. (b.) But if he should happen to imbibe from these erroneous impressions the idea that a fly or an ant really *was* on his skin, and should persist in this opinion against all reason, he would have a delusion, and would be intellectually insane. (c.) To what point this delusion might carry him no one could predict. It might and in a perfectly logical manner prompt him to steal, commit arson, murder his dearest friend or his worst enemy, or make a will, leaving all his property away from his natural heirs. Delusions are the essential feature of intellectual insanity, but of no other uncomplicated form of mental derangement. They are not, therefore, a scientific test of insanity in general.

IX. Insane actions are often the direct consequences of delusions: 1. The will, when the organism is in a normal condition, acts in obedience to the intellect, to the ideas which the healthy brain elaborates. 2. Persons intellectually insane follow the same law, and do those things to which their delusions logically lead them. A delusion, being a false conception of the intellect which is accepted as true, it exercises the same power over the will as a true belief. 3. A man, therefore, who imagines he hears the voice of God commanding him to kill his wife or his children, obeys with as much unquestioning faith in the reality of the impression made upon his auditory nerves as Abraham had when he received the divine command to sacrifice his only son. 4. Neither is the "knowledge of right and wrong" a test of the mental condition of an individual except to a very limited extent. The faculty in question is not inherent, but is the result of education; and what is right with one race, or nation, or community, is wrong with another, and *vice versa*; so that persons

of perfectly normal mental organization might be incapable of making the distinction according to our ideas. We all, at times, feel that those only are right whose views are in accordance with our own, and it is, therefore, most unwise to set up so arbitrary a standard as a test of the integrity of an individual's mind.

X. On the other hand, insane persons are often perfectly able to discriminate between acts which may be right or wrong according to their ordinary normal standard. A person manifestly insane will reason logically in regard to conduct which he knows has been contrary to law, and at variance with the principles instilled into him from childhood, but which he was not able to control or prevent.

XI. The emotions are at all times difficult to control, but they may acquire such undue prominence as to dominate over the intellect and the will, and assume the entire mastery of the actions in one or more respects: 1. The love of a father for his offspring is one of the most powerful of all the emotions, and under certain circumstances may be developed into a passion, or even an insane impulse. 2. As an example of the former, take the case of a father who saw his child in a burning house entirely surrounded by flames, and cut off from all chance of escape. Without stopping to reflect on the futility of the action, or on the certainty that his own life would be sacrificed, he rushed into the midst of the fire and smoke in the vain attempt to save the being so dear to him, and perished before half the space was traversed. (*a.*) In such a case a moment's exercise of the reasoning faculties would have been sufficient to show the hopelessness of the effort. (*b.*) But the emotion of paternal love was all-powerful; there was no intellect, no will, and the act was, there-

fore, one done in the "heat of passion," and as such differing only in unessential particulars from others which the law regards as criminal.

XII. The emotions are also subject to insane exaggeration through the influence of motives which act slowly, but with constantly-increasing force: 1. Thus, a mother is affected with emotional insanity from the fact that her son or daughter has become depraved or criminal. 2. She struggles against the consciousness that her hopes are blasted; but at last the intellect and the will yield, a settled melancholy predominates in all her thoughts, and she commits suicide, unable longer to bear up in the unequal conflict. 3. Here there is no delusion, no error of judgment, but simply an inability to apply her reasoning powers to the consideration of the subject, or to exercise her will against the overpowering emotion which renders her life a burden.

XIII. Again, there may be no motive whatever discoverable on the most minute examination: 1. To be sorrowful when we have met with a great misfortune, to rejoice when we have cause for gladness, to be jealous when there is reason, to be afraid when there is occasion for fear, are emotional actions which are common to mankind when in a state of complete health. 2. Some persons, however, are able to exercise a greater degree of control over the manifestations of their emotions than others who yield to very slight disturbances in the routine current of their lives.

XIV. Many examples of apparently causeless emotional insanity are met with in the practice of physicians who devote themselves to the study of mental diseases: 1. A few days ago I was consulted in the case of a lady who had become morbidly depressed without evident cause. For several hours every day

she sat weeping and wringing her hands. She could give no reason for the intense melancholy which affected her, and to escape from which she was ready to destroy herself. 2. Of course, in cases such as this there is a cause, but it is not primarily mental, or even emotional. It is to be found in the functional derangement of some one of the bodily organs, capable, by sympathetic action, of influencing the operations of the nervous system, or else is located in some part of the nervous system itself. 3. A gentleman occupying a prominent public position is now under my charge, suffering with profound melancholy, for which he can allege no cause. "The community," he said to me, "regards me as one of the most favored of men in every respect. I am wealthy, my children have turned out well, I have succeeded in all my undertakings, I have no source of anxiety or grief; and yet I am only restrained from committing suicide by the consciousness that reproach would fall upon my family. I exaggerate the petty trifles of life to momentous troubles; the conduct of my friends is misinterpreted; little slights are magnified into gross insults or serious wrongs; and yet I am inwardly conscious that no one commands a higher degree of respect than myself, or has a greater right to be happy." (*a.*) Here another emotion, that of family pride, is stronger for the present than those which depress him, and consequently it acts upon his will, and restrains him from committing suicide or other criminal act; (*b.*) but in an instant the balance may be reversed, and the slumbering embers kindled into flame by a scarcely-perceptible spark. A dose of opium, an undigested meal, an attack of constipation, a little irregularity in the action of the liver, a sleepless night, or a real cause for mental anxiety, might result in the

loss of the control he now has, and force him to commit a deadly injury to himself or others. (c.) How much greater would be his danger if, instead of a faithful wife, devoted children, and a placid existence, the last few years of his life had witnessed the wreck of all his domestic joys, the rise of enemies, and the success of the harassing measures they had undertaken against him!

XV. The emotions are also frequently secondarily deranged through the morbid operations of the intellect: 1. A person, for instance, imbibes the delusion that he has committed the unpardonable sin, or that God has deserted him, and in consequence passes into a condition of settled melancholy, during which he may attempt self-destruction to escape from his harrowing thoughts, or commit a homicide in order that the same end may be accomplished by his being hanged for murder. 2. Other emotions may, of course, be excited into morbid activity by derangement of the intellect. Delusional jealousy, anger, hatred, or love, may thus urge their unfortunate victim to the perpetration of crime, plunge him into a depth of unhappiness from which there is no escape, or lift him to an ecstasy of bliss far exceeding that derivable from the realization of all his wishes.

XVI. The brain may be so disordered, that insanity is manifested only as regards the will: 1. There are no false conceptions of the intellect, and no emotional disturbance, but solely an inability to exert the full will-power either affirmatively or negatively. 2. Many instances of "morbid impulse" are uncomplicated cases of volitional insanity, in which an idea, suddenly flashing across the mind, is immediately carried out by the individual, although his intellect and his emotions are

strongly exerted against it. (*a.*) Thus, a person who previously has not exhibited any very obvious symptoms of mental derangement—though careful inquiry will invariably show that slight evidences of cerebral disease have been present for some days—instantaneously feels a morbid impulse to commit a murder, or perpetrate some other criminal act. (*b.*) The many species of what is sometimes called “moral insanity,” may properly be classed together under the head of volitional insanity; of such are kleptomania, dipsomania, pyromania, etc. The subject of volitional insanity will be more fully considered in a subsequent part of this paper.

XVII. Hence the mind may be disordered as regards the perception, the intellect, the emotions, and the will, separately, and to this partial derangement the term “monomania” is often applied: 1. It may also be unsettled by the simultaneous perversion of two or more of these parts from the normal standard, and this state is frequently designated mania. 2. In general mania, the patient is insane in his perceptions, i. e., he has illusions and hallucinations; in his intellect, i. e., he has delusions, and is disordered in the faculties of judgment, memory, etc.; in his emotions, which become exaggerated or uncontrollable; and in his will, by which he is rendered incapable of self-control or self-direction.

XVIII. Dementia is that condition in which the mind, originally of normal character, has lost a portion of its power; and idiocy, that in which the mind has always been feeble.

From the foregoing remarks, it will be perceived that I regard insanity as a manifestation of disease of the brain characterized by a general or partial derange-

ment of one or more faculties of the mind, and in which, while consciousness is not abolished, mental freedom is perverted, weakened, or destroyed.

XIX. An essential feature of the definition here given of insanity is, that it depends directly upon a diseased condition of the brain: 1. This is the immediate cause, and may consist of structural changes due to injury, disease, or malformation, or of mal-nutrition, the result of excessive intellectual exertion, the action of powerful emotions, irritations in distant parts of the body, the sudden stoppage of the digestive process, the introduction into the system of certain drugs, such as opium, alcohol, belladonna, etc., the retention in the organism of substances poisonous in character, but which in health are excreted, and of other factors capable of altering the quantity or quality of the blood circulating through the cerebral vessels, or of accelerating or retarding the metamorphosis of tissue which the brain undergoes in common with all the other organs of the body. With this general view of the subject of insanity as I understand it, I pass to the consideration of points more intimately connected with the case under consideration.

XX. I have stated, incidentally, that there is a form of insanity which, in its culminating act, is extremely temporary in its character, and which, in all its manifestations, from beginning to end, is of short duration: 1. This species of mental aberration is well known to all physicians and medical jurists who have studied the subject of insanity. (*a.*) By authors it has been variously designated as transitory mania, ephemeral mania, temporary insanity, and morbid impulse. (*b.*) It may be exhibited in the perceptual, intellectual, emotional, or volitional form, or as general mania.

2. The exciting causes of temporary insanity are numerous. (*a.*) It may be induced by bad hygienic influences, such as improper food, exposure to intense heat, cold, or dampness, or to a noxious atmosphere; by excessive physical exercise, by disease of the heart, by blows upon the head or other parts of the body, by certain general and local diseases, by the abuse of alcoholic liquors, by the ingestion of certain drugs, such as opium, belladonna, and hashish, by excessive intellectual occupation, by loss of sleep, and, above all, by great emotional disturbances. (*b.*) Among these latter, are religious excitement, grief, disappointed affection, and especially anxiety, by which the mind is kept continually on the stretch, tortured by apprehensions, doubts, and uncertainties, and by which it is worn away more surely than by the most terrible realities.

3. The predisposing causes are to be found in the individual as an inherent part of his organization. (*a.*) They consist in an hereditary tendency to insanity, or to some other profound affection of the nervous system; (*b.*) or the possession of an excitable, nervous temperament, which is incapable of resisting those morbid influences which persons of phlegmatic disposition would easily withstand. (*c.*) Thus, all men are not affected alike by disturbing causes, because all men are not cast in the same physical or mental mould; a circumstance which will produce insanity in one person, will scarcely ruffle the equanimity of another.

4. The immediate cause of temporary insanity is the disease itself, of which the mental aberration is simply the manifestation. It may consist of—(*a.*) A condition of cerebral exhaustion, in which, owing to excessive wear and tear of the brain, new substance is not formed with sufficient rapidity to take the place of that used. (*b.*) The circulation

through the brain of blood which is not normal in quality. (*c.*) Cerebral congestion.

5. The first of these is more particularly the existing condition in those cases of temporary insanity which result from the excessive use of the brain and in which loss of sleep is a characteristic feature. (*a.*) Sleep is the period during which the brain rests and is recuperated; but if the sleep be insufficient, and the brain is kept in state of activity when it should be in repose, not only is its nutrition prevented, but it is still further exhausted by the demands made upon its substance. (*b.*) For, every sensation which it perceives, every emotion which it experiences, every thought which it elaborates, every volitional act which it performs, is the result of the destruction of the cerebral tissue: now, in healthy sleep the blood-vessels of the brain are comparatively empty; when they are overloaded, sleep is impossible. (*c.*) The existence of wakefulness not only indicates a morbid activity of the brain, but it is a positive sign of cerebral hyperæmia or congestion, which condition is intimately related to the one now under consideration.

6. The second condition—the circulation through the brain of blood of morbid quality is very often the disease which gives rise to temporary insanity. (*a.*) The retention in this fluid of the elements of the bile or urine vitiates its quality to such an extent as to interfere with the normal functions of the brain, and sometimes to cause temporary insanity. (*b.*) A similar state, though of course induced by different substances, is caused by the ingestion of alcohol, opium, belladonna, and other drugs. (*c.*) The temporary insanity, however, which is brought about by any poisonous material, animal or vegetable, contained in the blood, pre

sents peculiar features according to the character of the toxic substance, which are easily recognizable by the experienced physician.

(*d.*) The blood may be poisoned by the influence of certain emotions, and thus rendered unfit for the use of the brain. In regard to this point, Descuret¹ says:

“It is more than probable that the blood likewise experiences through the effect of the passions alterations of which chemistry will hereafter perhaps be able to ascertain the nature.”

7. We know too that a violent emotion will so interfere with the action of certain excretory organs as to arrest their functional activity and thus cause the effete and poisonous substances which it is their office to eliminate, to be retained in the blood. (*a.*) Excessive passion has also been known so to alter the constitution of the mother's milk as to render it a deadly poison to the infant at her breast. (*b.*) Offspring begotten by a father who is suffering from harassing emotion are born idiotic or with a marked proclivity to diseases of the nervous system; fear or sorrow will even in a single night blanch the hair; the sweat of persons under the influence of strong passions acquires a peculiar odor; and the saliva of an angry man is sometimes as poisonous as that of a rabid dog. (*c.*) All these changes must take place through the medium of the nervous system, and the blood, whereby the latter undergoes some radical change. (*d.*) There is every probability that the sudden outbursts of mania during or immediately after great emotional excitement are in part at least the result of morbid alterations in the quality of the blood.

¹ La Médecine des Passions, ou les Passions considérées dans leurs rapports avec les Maladies, etc. Paris. 1860. Tome i., p. 175.

8. The third diseased state which may give rise to temporary insanity is that which is characterized by an increase in the amount of blood contained in the brain. This condition may be induced by causes similar to those which produce mal-nutrition and morbid changes in the constitution of the blood. Some of these, however, require more particular consideration than has yet been given them in this paper.

9. The quantity of blood in the brain is increased by long-continued exercise of the intellectual powers. (*a.*) We are all familiar with this fact in our own persons, from the sensations of heat, fulness, and sometimes pain we experience after we have overtaken our brains. Several cases of mental derangement, the effects of excessive work, imposed upon the brain, have come under my observation, and the influence is well recognized by all alienists. (*b.*) For the full exercise of the cerebral functions blood is necessary in large amount, and it must be frequently renewed. In this respect the brain does not differ from the other bodily organs, but the supply of blood sent to it is greatly in excess of that received by any of them, for the reason that while they have their periods of rest the brain is active every instant of life; not even sleep affording it entire repose in all its parts. Now, increased action requires an increased amount of blood; the vessels thus become overdistended, they lose thereby their ability to contract, and thus even after the exciting cause is removed they still continue dilated. (*c.*) Congestion is thus induced, and the individual rendered liable at any moment to an attack of mania, or temporary insanity.

(*d.*) Congestion of the brain and temporary insanity may be produced by an overdistended stomach.

A case of the kind is now under my care. A gentleman ate hurriedly a hearty meal, and in a short time afterward became furiously maniacal, during which state he had to be forcibly restrained from injuring himself and others.

(*e.*) Alcohol, opium, belladonna, and other drugs, likewise cause cerebral congestion. This fact is so well known that it is scarcely necessary to do more than allude to it. That temporary insanity is produced by them is a fact with which all are familiar.

10. Passing over several other causes of congestion of the brain, we come to one set of factors which are more potent than any other, and these are the emotions. (*a.*) There is a nerve in the body which, from its connections with all the bodily organs, and its manifest office in the economy, is called the sympathetic or emotional nervous system. (*b.*) Through this system the heart beats with augmented force and frequency under the influence of anger or other emotional disturbance; (*c.*) Through it the desire to urinate is felt in anxiety; (*d.*) Through it the action of the liver or kidneys is arrested or perverted in rage or jealousy; (*e.*) Through it the muscles of the face expand in joy and those of the chest and abdomen contract convulsively in the laughter of mirth; (*f.*) Through it the lachrymal gland is excited to increased activity, and the tears flow down the cheeks in sorrow and anguish; (*g.*) Through it the saliva ceases to be secreted in fear or is formed in excessive quantity by the emotions excited at the sight of a savory dish; (*h.*) And through it the milk in the mother's breast ceases to be secreted in alarm, anxiety, or grief.

11. But the sympathetic system of nerves has another most important office to perform in the organism,

and one which in its relations to the present subject is of very great moment. (*a.*) It is the organ by which the size of the blood-vessels is regulated, and many of the examples cited of its action depend upon this property. (*b.*) The effect of certain emotions is, however, directly seen in the blushing produced by shame, and the pallor caused by fear. (*c.*) In the one case the vessels dilate and the blood flows in torrents to the face and heart; in the other they contract, and this fluid cannot enter the more minute ramifications. (*d.*) Emotional disturbance with equal certainty increases or diminishes the amount of blood in the brain. (*e.*) This is shown not only by the vertigo, the heat in the head, the suffusion of the eyes, the throbbing of the carotid and temporal arteries, the rupture of blood-vessels, and the sudden death produced by the one action, and the syncope resulting from the other, but by direct observation of the fundus of the eye with the ophthalmoscope. (*f.*) No fact in medical science is more clearly established than this, of the action of the emotions over the circulation of blood in the brain.

XXI. Now, what is the condition known as transitory mania?

1. It may be defined as a form of insanity in which the individual, with or without the exhibition of previous *notable* symptoms, and with or without *obvious* exciting cause, suddenly loses the control of his will, during which period of non-control he commonly perpetrates a criminal act, and then as suddenly recovers more or less completely his power of volition.

2. Attentive examination will always reveal the existence of symptoms precursory to the outbreak which constitutes the culminating act, though they may be so slight as to escape superficial examination.

(*a.*) The hypothesis, therefore, that a person may be perfectly sane one moment, insane the next, and then again perfectly sane in a moment, is contrary to all the experience of psychological medicine.

3. The symptoms indicative of an approaching attack of temporary insanity are chiefly those of cerebral congestion, though it will be found upon thorough examination that other organs besides the brain are more or less deranged in their functions. (*a.*) Thus the appetite is lessened or altogether abolished, the bowels are torpid, the kidneys fail to eliminate the normal quantity of urine, the heart becomes irregular in its action, and beats with increased frequency—a certain sign of a weak and excited nervous system—and the skin is either bathed in perspiration or is dry and harsh.

4. The initial symptoms of cerebral congestion can always, even when slight, be detected by a physician accustomed to the study of diseases of the nervous system, and are generally so decided as to be noticeable by the patient, and by persons not familiar with medical science. (*a.*) Among the most prominent, and in its effects the most exhausting, is wakefulness. It indicates beyond all doubt an increased flow of blood to the brain, and in its turn it reacts upon this organ, and still further deranges its normal functions. The effect, therefore, becomes a cause.

5. With the wakefulness there is generally combined great mental and physical irritability. The patient is occupied with the thoughts and emotions which have engaged his attention during the day, and he dwells upon them not only with intensity of thought, but often with the intellect perverted from the mode of action natural to him. (*a.*) He may likewise have illusions, hallucinations, and delusions, and when

he does, toward morning, obtain a little sleep, he is disturbed with frightful dreams which prevent his being refreshed.

6. And his condition is such that he is prevented taking the ordinary means of quietly going to bed in order to obtain sleep. His whole nervous system is in such an irritable state, that he paces his chamber the greater part of the night, or seeks the open air, and walks the streets till, thoroughly exhausted mentally and physically, he succeeds in getting a little inquiet slumber.

7. All writers on subjects connected with psychological medicine have insisted with great force on the influence of insomnia in causing mental aberration. In my work on "Sleep and its Derangements," I have dwelt at length on this point, but no one has done so with more emphasis than Dr. Isaac Ray.¹ (*a.*) He says, in regard to the injurious effects of wakefulness:

"One of its most common effects is a degree of nervous irritability and peevishness, which even the happiest self-discipline can scarcely control. That buoyancy of the feelings, that cheerful, hopeful, trusting temper, that springs far more from organic conditions than from mature and definite convictions, give way to a spirit of dissatisfaction and dejection; while the even demeanor, the measured activity, are replaced either by a lassitude that renders any exertion painful, or an impatience and restlessness not very conducive to happiness. Upon the intellectual powers the mischief is still more serious. They not only lose that healthy activity which combines and regulates their movements in the happiest manner, but they are no longer capable of efforts once perfectly easy. The con-

¹ Mental Hygiene: Boston, 1863, p. 98, *et seq.*

ceptions cease to be clear and well defined, the power of endurance is weakened, inward perceptions are confounded with outward impressions, and illusory images obtrude themselves unbidden upon the mind. This kind of disturbance may pass sooner or later into actual insanity, and many a noble spirit has been utterly prostrated by habitual loss of rest. . . .

(b.) "Where a predisposition to insanity exists, nothing proves to be a more potent exciting cause than the loss of sleep. Persons thus unfortunately constituted must beware how they allow their duties or pleasures to interfere with this restorative process, which is indispensable even to their perfect safety. The records of our asylums show that in a large proportion of cases the disease was attributable chiefly to this cause, which a little more prudence would have prevented."

8. Before long and sometimes from the very first, the intellectual faculties become involved. The ideas even in regard to simple things are confused and without logical arrangement, the sense of identity is often perplexed, the speech—the outward manifestation of the thoughts—is incoherent, the memory fails in regard to recent occurrences, the judgment is weak and vacillating, and the sufferer, naturally accustomed to rely upon his own intellect, loses faith in his mental capacity, and turns to others for the advice and guidance which he feels he needs; any effort at continuous or severe thought, and especially arithmetical calculations, increase the difficulties of the mind, but no cause is so potent in this respect as emotional disturbance.

9 In addition to the foregoing evidences of mental and physical disorder, the face is flushed, the eyes suffused, the carotid and temporal arteries beat with increased force, vertigo is generally complained of, and

the pupils are contracted sometimes to mere points. Examination with the ophthalmoscope shows the vessels of the retinæ to be increased in number, diameter, and tortuosity, and to pulsate with more than normal force. The optic disk is often found congested, and there is peripapillary infiltration.

10. The æsthesiometer reveals the existence of abnormal sensibility, either an increase or a diminution, on one side or other of the body.

11. The patient is likewise unable to make a straight line with the dynamograph, by reason of the irregular nervous action which originates in his brain.

12. Now, this state may exist for weeks or months, with more or less intensity, aggravated or lessened by the habits of life, the occupations, and the emotions and thoughts of the patient. (*a.*) It may then pass away, or, what is more commonly the case, it terminates in—1. An attack resembling apoplexy. 2. Epileptiform convulsions. 3. Inflammation of the brain or its membranes. 4. Mania, often of a transitory character. (*b.*) With the first three of these modes of culmination we have nothing to do at present. The fourth is of more momentous importance. (*c.*) “Even in healthy persons,” says Dr. I. Crichton Brown,¹ of the Derby County Asylum, England, in his article on “Mania Ephemera,” “or in persons of plethoric habit, this determination of blood may occasion transient delirium, with various signs of encephalic disturbance, such as extreme sensibility to light and sound, restlessness, pain in the head, and visual hallucinations; a flood of distorted ideas flows through the mind, and overpowers it, bewilderment and incoherence follow, and

¹ Medical Critic and Psychological Journal. Edited by Dr. Forbes Winslow. No. IX. January, 1863, p. 49.

for the time being the patient is to all intents and purposes maniacal. A distinguished physician narrates the case of a gentleman subject to attacks of determination of blood to the head, which caused him so much suffering and loss of moral control that he cut his throat to destroy his life. While recovering from the wound, attacks sometimes came on, first with beating of the carotids, then with flushing of the face and head, suffusion of the eyes, and feeling of distraction in the head. But it is not in the plethoric or healthy that determination of blood to the head is so likely to produce ephemeral mania as in the weak and anæmic, who, though suffering from general depression and debility, are still liable to irritation and exaltation of all the corporeal functions. And of all functions those of the nervous centres have been found most liable to excitement in cases of spanæmia. The generally intensely nervous character of persons with greatly prostrated strength has been long remarked, as also their proneness to excitement."

(*d.*) Dr. W. Carmichael McIntosh¹ of Murray's Royal Asylum, Scotland, in his paper on "Morbid Impulse," says:

"Ordinarily, friends around do not dream of mental derangement, and even one examination by a physician may not always lead the patient to betray his defect, unless very skilfully handled; yet, in no long time a desperate or disgraceful act may startle all alike by its impetuous suddenness and dangerous nature. For instance: it is related that a gentleman of high attainments and character, while in the apparent enjoyment of excellent health and spirits, had a dinner-

¹ Medical Critic and Psychological Journal, No. IX., January, 1863, 102.

party of his friends; there was no one present so agreeable and attractive in conversation and manners as himself, but in the middle of the festivity he arose and politely apologized for absenting himself a moment, and retired to an adjoining room, cut his throat to the vertebræ at the very time that his friends were drinking his health."

(e.) Dr. A. Devergie,¹ one of the most eminent alienists in France, in a paper read before the Imperial Academy of Medicine, entitled "Transitory Homicidal Mania; where does Reason end or Mania begin?" says: "Those physicians who have devoted themselves to the treatment of insanity, admit that, besides dementia, mania, and monomania, there exists an instantaneous, transient insanity, which they call transitory, and as the result of which an individual, until then, in appearance at least, of sound mind, commits suddenly a homicidal act, and returns as suddenly to a state of reason."

XXII. It would be easy to quote a hundred authors of recognized preëminence in psychological medicine, to the effect that such an affection as temporary insanity really exists. The authorities on medical jurisprudence are likewise decided upon this point, and the fact is accepted every day by courts of law. It is unnecessary, therefore, to adduce further support to the doctrine.

XXIII. But the plea of temporary insanity is often abused. Suicide is extenuated, and criminals escape, on the ground that their acts, committed in the "heat of passion," are perpetrated during an attack of temporary insanity.

¹ The Journal of Psychological Medicine and Mental Pathology, No. XVI., October, 1859, p. 538.

1. Premising, therefore, that there is no doubt that emotion may give rise to temporary insanity, I proceed to indicate the marked differences which exist between "heat of passion" and temporary insanity. To do this effectually, clear ideas must first be formed of the meaning of certain terms.

2. An emotion is that pleasurable or painful sensation which arises in us in consequence of sensorial impressions or intellectual action. According to Bain, the word emotion is used to comprehend all that is understood by feelings, states of feelings, pleasure, pain, passion, sentiments, affection, etc.

3. Passion is emotional activity. It designates that state of the mind in which certain impressions or emotions are felt, and which is accompanied by a tendency or impulse, often irresistible, to act in accordance with these impressions or emotions irrespective of the intellect. An act performed in "the heat of passion" is one prompted by an emotion which, for the moment, controls the will, the intellect not being called into action. It is an act, therefore, performed without reflection. (a.) The passions are to a certain extent under the control of the will; and this power of checking their manifestations is capable of being greatly increased by self-discipline. Some persons hold their passions in entire subjugation, others are led away by very slight emotional disturbances. (b.) The law recognizes the natural weakness of man in this respect, and wisely discriminates between an act done after due reflection and one committed in the midst of passional excitement.

4. The acts performed during temporary insanity, in their more obvious aspects, and when viewed isolatedly, resemble those done in the heat of passion. *But they are so only as regards the acts themselves.*

(a.) Thus, a person entering a room at the very moment when one man was in the act of shooting another, would be unable to tell whether the homicide was done in the "heat of passion," or under the influence of temporary insanity. (b.) He would be equally unable to say whether it was committed with malice aforethought or in self-defence. (c.) The act, therefore, can teach us nothing. We must look to the circumstances and to the antecedents of the perpetrator for the facts which are to enlighten us as to the state of mind of the actor. Now, the conditions of temporary insanity are so well marked, that there can be no difficulty on this score, and those which precede the act of culmination have already been dwelt upon at sufficient length; suffice it, therefore, to repeat, *that the act which marks the height of the paroxysm is always preceded by symptoms of mental aberration, while acts done in the heat of passion are not thus foreshadowed.*

5. And, as regards the subsequent state of the individual, the distinction is equally apparent. (a.) The one who has committed a criminal act in the heat of passion, soon subsides to his ordinary equanimity, and begins to think of his safety. (b.) The other, who has perpetrated a similar act during an attack of temporary insanity, never thinks of escape, nor even avoids publicity. He may even boast of his conduct, or deliver himself into the hands of the law. (c.) What is, however, of greater importance, is the fact that, though he may subside into a condition of comparative sanity, *the evidences of disease are still present, and remain in him for days, weeks, or even months and years.* These symptoms are in general those of cerebral congestion, to which attention has already been directed.

6. In heat of passion the act follows immediately

on the excitation of which it is the logical sequence. In temporary insanity, the act is the culmination of a series of disordered physical and mental manifestations, and may or may not be in relation with the emotional cause.

7. Bellart, quoted by Devergie, has said that, by assimilating the passions to mental alienation, immorality is justified: it is placed upon the same level as calamity. The man who acts under the empire of passion has commenced by suffering his will to become depraved. The man who acts under the influence of calamity obeys, as a machine, a force, the power of which he cannot contend with. How far the accused in the present case was acting from passion, and how far he was under the influence of a calamity, the force of which he could not resist, will be apparent from a consideration of the facts developed during the trial, and those which I have ascertained by my personal examination.

XXIV. 1. On the 25th of November, 1869, at about five o'clock in the afternoon, the accused was standing at the end of a counter in the office of the *Tribune*, in this city. A few minutes previously he had been writing at a desk. While standing as above stated, Albert D. Richardson entered the office, crossed it, and went to a desk at the end of the counter near where the accused stood. The counter was between the parties. The accused, distant about four feet, drew a pistol and fired at Richardson, wounding him in the abdomen. Death ensued on the 2d of December.

2. Immediately after the shooting, the accused left the office without molestation, and proceeding to the Westmoreland Hotel, at the corner of Fourth Avenue and Seventeenth Street, registered his name in full, and

had a room assigned to him. A few hours afterward he was arrested.

3. It is in evidence that the accused, who was a married man, was devotedly and passionately attached to his family; that he had intercepted a letter from the deceased to his wife, which was calculated from its sentiments to arouse the most powerful emotions in the human mind; that his wife had left him, taking with her both the children; that he had instituted legal proceedings to obtain the possession of his offspring; that he was opposed by his wife and the deceased, the latter supplying the funds for the resistance of the father's efforts; that these troubles partially unsettled his reason, so that several persons who knew him and were thrown into contact with him remarked that he was incoherent, rambling, excited, and the thought of his domestic difficulties was almost continually present, as shown by his conversation and actions; that he was unable to sleep; that he wandered through the streets at night in all kinds of weather, talking of his troubles to policemen and others; that he could not by reason of his mental condition perform properly the duties of the office he held under the Government of the United States; that various powerful medicines, such as morphia, Indian hemp, hyoscyamus, and bromide of potassium, had been prescribed for him in large doses by his medical attendants; that for several days previous to the homicide he had taken large quantities of morphia; that during this period, and even before, his pulse was never below 104 per minute, and was frequently much more rapid; that his face was flushed, that there was involuntary twitching of the facial muscles; that his eyes were suffused and his pupils contracted; that he had flashes of light

and dark specks before his eyes; that he suffered from vertigo; that his head was painful and hot; that he had frequent outbursts of excitement; that he had hallucinations and delusions; that he had doubts as to his identity; that he had threatened to commit suicide; that his memory was impaired; that while in this condition he heard that a divorce had been granted to his wife in the State of Indiana, on *ex parte* statements; that the symptoms of mental disorder then became greatly aggravated; and that on the afternoon of the homicide he was met in the street by a friend who remarked his wild expression, and who was convinced that he was not in his right mind.

4. It is also in evidence that a first-cousin of the accused died insane, and that the resemblance of the latter to him in features and manner is very great.

5. From this full and decided evidence, there can be no doubt in regard to the mental condition of Daniel McFarland during a long period previous to the homicide; and that, for about two weeks prior thereto, his state was such as to render him entirely irresponsible for his acts. If he had been taken away to a distance, he might, and probably would have recovered his mental control, and the homicidal act would never have been perpetrated; but, surrounded as he was with all the associations and circumstances which had so unsettled him, and constantly receiving fresh accessions to his troubles, recovery was impossible. While at the very height of his state of mental aberration, he accidentally met the man most nearly connected with the origin of all his difficulties—the one to whom he attributed the wreck of his hopes—the one who, he believed, had injured him more than all the rest of the world combined. Without an in-

stant's reflection, indeed in his condition without the possibility of reflection, he perpetrated the act for which he has just been tried for his life. The sight acted upon him just as does the sight of dangerous weapons upon other insane persons.

6. A case related by Dr. McIntosh, in the memoir already cited, well illustrates this point: A religious monomaniac had for many years an antipathy to a fellow-patient who assisted in his gallery, imagining that he practised animal magnetism and various other tortures of his "soul" upon him. He avoided him as much as possible, but he never evinced any homicidal tendency, at least so as to attract attention. So far from being suspected of such a tendency, he was indeed trusted with many weapons, such as cricket-bats, bows and arrows, etc., which might have been used with deadly effect on his victim had he chosen, for he was often within easy access. One rainy winter evening, however, he startled the gallery by a sudden and desperate onslaught on his victim, resulting in the death of the latter. Seeing the object of his antipathy reclining easily on a sofa and sleeping, and espying a ready and rare weapon at hand, he advanced stealthily upon him so as to approach the sleeping person from behind, then wielding the weapon on the devoted man's head so conveniently situated, he caused a compound comminuted fracture of a fatal nature. He subsequently confessed that it was the sight of the weapon and the tempting posture of his neighbor that overcame him.

7. The first thought of a person who has criminally killed a human being is ordinarily of his own safety. He is conscious that he has committed an offence, he knows that he has incurred punishment, and he seeks

to escape it. The accused took no measures toward that end; on the contrary, he went to a well-known hotel, registered his name, and quietly waited to be arrested. This was not the act of a criminal. It is exactly, however, such conduct as might have been expected from an insane man.

8. The antecedents of the accused and the concomitant circumstances of the culminating catastrophe leave no doubt that for a considerable period before the homicide he was affected with mental derangement, that the act itself was done during an attack of temporary insanity, and that immediately subsequent thereto he was not entirely restored to reason.

XXV. And now as to his subsequent condition :

1. On the 6th of March, three months after the homicide, I visited Daniel McFarland in the city prison, at the request of his counsel, and saw him for the first time.

2. I found his head large, well formed, and exhibiting no marks of injury or disease, his general appearance indicated a sanguineo-nervous temperament.

3. His whole nervous system was largely developed and irritable to an extreme degree, as shown by involuntary twitching of the facial and other muscles, great excitability of manner and an easily-aroused emotional nature.

4. The symptoms of cerebral congestion present were: abnormal heat of the face and head, throbbing of the carotid and temporal arteries, suffusion of the eyes, unequal size of the pupils, intolerance of light, pulse rapid (108) and irregular, a different degree of sensibility on the two sides of the body, as shown by the æsthesiometer, and congestion of the retinae and optic disks, with partial atrophy of the latter, as revealed by ophthalmoscopic examination.

5. The foregoing symptoms were objective. The subjective symptoms were wakefulness, flashes of light before the eyes, noises in the ears, and pain and a sensation of fulness in the head.

On the 10th of March I made another examination.

6. I found the face flushed, the muscles twitching, the eyes suffused, the head hot, and the pulse ranging from 104 to 114. The mental excitability was excessive, especially when his troubles were mentioned, and there was a constant disposition to talk about his affairs. While my finger was on his wrist, I happened to mention Mr. Richardson's name, when his pulse at once increased from 104 to 128 per minute.

March 18th.—He was much excited and began at once to talk of his troubles; pupils contracted; pulse 108, 104, 124, hard and full; face flushed, and temporal and carotid arteries throbbing with violence; muscular twitching greater than I had ever before seen it in him.

March 21st.—Pulse, 110; other phenomena similar to those present on 18th.

March 29th.—At this visit I showed him the photographs of his wife, and asked him some questions about them. At the sight of them he was much moved, tears came into his eyes, his voice trembled, his speech became incoherent and rambling, his articulation indistinct, and the muscular twitching was increased. His pulse rose to 142, and I was for a time apprehensive of serious consequences. After a while, however, he began to weep, and I succeeded in bringing him to something like calmness. But, during the whole of my interview, which lasted over an hour, he remained excited, and was at times incomprehensible in his language.

April 3d.—Dr. Austin Flint visited him with me,

and expressed the opinion, after a very full examination, that there was no disease of the heart or lungs, and that the frequency of his pulse was due to nervous derangement.

On the 20th of April I examined the accused again. His pulse was 132. The dynamograph showed that his muscular tone was low, and his nervous system weak and irritable.

7. The facts obtained at these examinations show that the accused at a period of more than three months after the homicide was still suffering with cerebral congestion; but perhaps not so extreme in degree as for several weeks before this event, but yet to such an extent as might readily with a sufficient exciting cause be developed into a condition of much greater severity. The confinement and seclusion he had undergone had certainly exercised a curative influence such as would have attended his isolation in an asylum for the insane.

The result of the trial is well known. After an absence from the court-room of scarcely two hours, the jury returned a verdict of not guilty. That this verdict was based upon the views expressed by the medical experts for the defence, of whom the writer was one, I have positive assurance. Into the merits of the other questions raised before, during, and since the trial, it is not in my province to enter. That the accused was insane for a long period before the homicide there can be no doubt. The touching story of his wife published since the trial shows this in such indubitable language, and she expresses her opinion to this effect so decidedly, that the wonder is why her unfortunate husband was not long since placed under the restraint of an asylum, and why, before he was tried for his life, the facts and opinions contained in her statement and that

of Mr. Richardson were not brought forward in extenuation of his conduct. That he is at present in such a physical and mental condition as to render him liable upon comparatively slight cause to another explosion of mania is a fact in regard to which repeated examinations leave no doubt upon my mind.

THE NEW YORK MEDICAL JOURNAL,

EDITED BY

E. S. DUNSTER, M. D.,

Professor of Obstetrics and Diseases of Women and Children in the University of Vermont.

Is published monthly; each number contains 112 pages, making two large octavo volumes yearly, of nearly 700 pages each.

THE VOLUMES BEGIN IN JANUARY AND JULY.

Terms, \$4 per annum. Specimen numbers sent by mail on receipt of 25c.

Since its Enlargement, the New York Medical Journal contains more Reading Matter than any Monthly Medical Journal published in this Country.

"One of the best Medical and Surgical Journals published on the American Continent."
—*London Medical Times and Gazette.*

"The editor and the contributors rank among our most distinguished medical men, and each number contains matter which does honor to American medical literature."—*Boston Journal of Chemistry.*

"Full of valuable original papers abounding in scientific ability."—*Chicago Medical Times.*

"Taking it all through, its beauty of paper and print, its large-sized type, the high character of its contributors, its general usefulness, we know no other periodical that we would rather present as a specimen of American skill and intelligence than the New York Medical Journal."—*Franklin Repository.*

CLUB RATES.

N. Y. MEDICAL JOURNAL and Appletons' New Weekly JOURNAL....	\$7.00
PSYCHOLOGICAL " " " "	8.00
N. Y. MEDICAL JOURNAL and PSYCHOLOGICAL JOURNAL.....	8.00

PREMIUM PORTRAIT.

As a premium to new subscribers to either of our Medical Journals at the regular subscription rate, we will send a magnificent line and stipple engraving, size 19x24 inches, of the distinguished physician, the late Dr. JOHN W. FRANCIS. This engraving is eminently adapted to adorn the parlor of the physician. The price of the portrait alone is \$3.

Payment in all cases must be in advance.

Remittances should be made by postal money order or check to the Publishers,

D. APPLETON & CO.,

90, 92 & 94 Grand St., New York.

TWO IMPORTANT NEW MEDICAL BOOKS.

D. APPLETON & CO., New York,

Have just published :

I.

A TEXT-BOOK OF PRACTICAL MEDICINE,

With Particular Reference to Physiology and Pathological Anatomy.

By Dr. FELIX VON NIEMEYER,

Prof. of Pathology and Therapeutics ; Director of Med. Clinic of University of Tübingen.

Translated from the Seventh German Edition, by special permission of the Author,
By GEO. H. HUMPHREYS, M. D., and CHAS. E. HACKLEY, M. D.

In two volumes, octavo. 1,500 pp. Price, in cloth, \$9.00; in sheep, \$10.50.

"The sciences of Pathology and Therapeutics have made vast strides within the last ten years ; and, for very many important researches and discoveries in both these branches of medicine, we are indebted to Germany. Professor Niemeyer's volumes present a concise and well-digested epitome of the results of ten years of carefully-recorded clinical observation by the most illustrious medical authorities of Europe, together with many valuable and practical deductions regarding the causes of disease and the application of remedies, such as we believe have not yet been assembled in any single work."

Extract from the Author's Preface to the Seventh German Edition.

"Nearly ten years have elapsed since the first appearance of my text-book. Meanwhile, clinical medicine owes a rich accession of knowledge to investigations made, not only in her own province, but in the provinces of physiology, pathological anatomy, and physiological and pathological chemistry. Important questions have been settled : obscure points rendered clear ; false theories corrected, and errors recognized. . . . In the present edition, but few portions of the work remain unaltered ; and even those few have nearly all undergone revision on previous occasions. Most parts of it have received valuable emendations, and have been enriched by copious additions."

II.

ELECTRICITY

In its Relations to Practical Medicine.

By Dr. MORITZ MEYER, Royal Counsellor of Health, etc.

First English, from the Third German Edition ; translated, with Notes and Additions, by WILLIAM A. HAMMOND, M. D., Professor of Diseases of the Mind and Nervous System, and of Clinical Medicine, in the Bellevue Hospital Medical College ; Vice-President of the Academy of Medical Sciences ; late Surgeon-General of the U. S. Army, etc., etc.

In one volume, octavo. 500 pp. In cloth. Price, \$4.50.

"The general practitioner must have this book. . . . Prof. Hammond, by this faithful translation, with additions, has conferred a blessing on his professional countrymen, and through them upon the American people ; indeed, upon those everywhere who speak the English language. The translation, we are assured, is faithful, and the paper, type, and binding are all beautiful, making the volume sightly and elegant."—*Nashville Medical Journal, Oct., 1869.*

"A complete, concise, and practical treatise upon this subject has long been a desideratum, and we are much mistaken if the work before us is not just the one the profession needs. It is by far the best we have yet seen upon the subject, and we can cordially recommend it to any who wish to be up in the latest advances in medical electricity."—*Leavenworth Medical Herald, Oct., 1869.*

"On the intricate subject of Electro-therapeutics, no higher authority exists than Dr. Moritz Meyer, nor could a better exponent of his researches and views be found than Dr. Hammond, whose own investigations in this field have developed many valuable results. The product of their joint labor, now before us, is an exhaustive treatise, the importance of which, to every practitioner who would deal intelligently with what is in many cases the most potent, if not the only, remedial agent, can hardly be overestimated. . . . Of especial interest is the section on 'Electricity in its application to Anatomy, Physiology, and Pathology,' in which the beautiful experiments of Duchenne are cited ; and that on the aid afforded by electricity in the diagnosis and prognosis of paralytic affections. The most important addition made by the editor is an elaborate article on 'Organic Infantile Paralysis,' as careful and complete as are most of his productions. As a whole, the work is one which no one who wishes to do his duty to patients suffering from nervous maladies can afford to be without, and one which will be referred to oftener than most books in a physician's library."—*Medical Gazette (New York), Sept. 13, 1869.*